PATENT APPLICATION

ATTORNEY DOCKET NO. ___200308305-2___

IN THE
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Vladimir Pavlovic and James M. Rehg

Confirmation No.: 1940

Application No.: 10/662,067

Examiner: Not assigned

Filing Date: 09/12/03

Group Art Unit: 2621

Title: METHOD FOR VISUAL TRACKING USING SWITCHING LINEAR DYNAMIC SYSTEM MODELS

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

(X) under 37 CFR 1.97(b), or
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)

( ) under 37 CFR 1.97 (c) together with either a:
( ) Statement under 37 CFR 1.97(e), or
( ) a $180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)

( ) under 37 CFR 1.97 (d) together with a:
( ) Statement under 37 CFR 1.97(e)(1) or (2), and
( ) a $180.00 fee set forth in 37 CFR 1.17(p).
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of ___$0.00___ . At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

(X) Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Statement together with any required copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

( ) A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

(X) I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450. Date of Deposit: _1/27/04_
OR
( ) I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number_____ on _____
Number of pages:

Typed Name: Margaret A. Norcutt
Signature: _Margaret A. Norcutt_

Respectfully submitted,

Hamilton, Brook, Smith & Reynolds, P.C.

By _[signature]_

Mary Lou Wakimura

Attorney/Agent for Applicant(s)
Reg. No. **31,804**

Date: _1-27-04_

Telephone No.: **(978) 341-0036**

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FORM PTO-1449		200308305-2	10/662,067	1940
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT		APPLICANT Vladimir Pavlovic et al.		
(Use several sheets if necessary)		FILING DATE 9/12/03	GROUP 2621	

REFERENCE DESIGNATION   U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
	1A	6,480,876 B2	11/12/02	Rehg et al.	
	1B	6,396,878 B1	05/28/02	Piirainen	
	1C	6,314,204 B1	11/06/01	Cham et al.	
	1D	6,256,418 B1	07/03/01	Rehg et al.	
	1E	5,243,037 B1	06/05/01	Pulford et al.	
	1F	6,226,409 B1	05/01/01	Cham et al.	
	1G	6,064,703	05/16/00	Cusani et al.	
	1H	5,923,712	07/13/99	Leyendecker et al.	
	1I	5,325,098	06/28/94	Blair et al.	
	1J	6,393,046 B1	05/21/02	Kohli et al.	
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	1L					
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)

	1Q	Murphy, Kevin P., Switching Kalman Filters, August 21, 1998, pp. 1-16.
	1R	Murphy, Kevin P., Inference and Learning in Hybrid Bayesian Networks, Report No. UCB/CSD-98-990, January 1998, pp. 1-18.
	1S	Ghahramani, Zoubin and Hinton, G.E., Variational Learning for Switching State-Space Models, Gatsby Computational Neuroscience Unit,, pp. 1-26.

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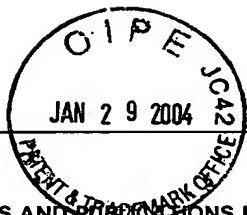| EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
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	2Q	Pavlovic, Vladimir, et al., Time-Series Classification Using Mixed-State Dynamic Bayesian Networks, In Computer Vision and Pattern Recognition, pp. 609-615, June 1999.
	2R	Pavlovic, Vladimir, et al., A Dynamic Bayesian Network Approach to Figure Tracking Using Learned Dynamic Models.
	2S	Welch, Greg and Bishop, Gary, An Introduction to the Kalman Filter, Department of Computer Science, Univ. of North Carolina at Chapel Hill, Chapel Hill, NC 27599-3175, September 17, 1997, pp. 1-16.

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	3Q	http://www.scs.leeds.ac.uk/scs-only/teaching-materials/HiddenMarkovModels/html_dev/main.html.
	3R	Shumway, R.H. and Stoffer, D.S., Dynamic Linear Models with Switching, Journal of the American Statistical Association, September 1991, Vol. 86, No. 415.
	3S	Bar-Shalom Y. Li, X-R, Estimation & Tracking: principles, techniques, and software. YBS, Storrs, CT, 1998, pp. 446-484.

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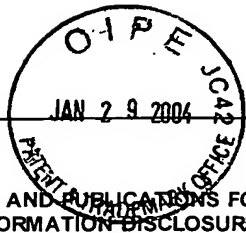| ATTY. DOCKET NO.	APPLICATION NO.	CONFIRMATION NO.
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	4Q	Jordan, M.I., et al., An Introduction to Variational Methods for Graphical Models, October 11, 1999, http://www.stat.berkeley.edu/tech-reports/index.html, Report#508.
	4R	Ghahramani, Z., et al., Switching State-Space Models, pp. 1-23. Technical Report CRG-TR-96-3, Dept. of Computer Science, University of Toronto.
	4S	Rabiner, L.R. and Juang, B.H., An Introduction to Hidden Markov Models, IEEE ASSP Magazine, January 1986, pp. 4-16.

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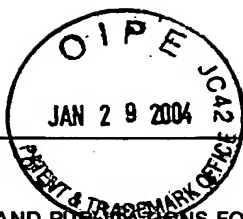| EXAMINER INITIAL		DOCUMENT NUMBER	PUBLICATION DATE	NAME	Pages, Columns, Lines Where Relevant Passages or Figures Appear
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	5Q	Kim, Chang-Jin, Dynamic Linear Models with Markov-Switching, Journal of Econometrics 60, (1994) pp. 1-22.
	5R	Krishnamurthy, V. and Evans, J., Finite-Dimensional Filters for Passive Tracking of Markov Jump Linear Systems, Automatica, Vol. 34, No. 6, pp.765-770, 1998.
	5S	Minka, Thomas P., From Hidden Markov Models to Linear Dynamical Systems, pp. 1-10. ftp://vismod.www.media.mit.edu/pub/tpminka/papers/minka-lds-tut.ps.gz.

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	6Q	Ghahramani, Z. and Hinton G.E., Parameter Estimation for Linear Dynamical Systems, pp. 1-6, Technical Report CRG-TR-96-2, Dept. of Computer Science, University of Toronto.
	6R	A Brief Introduction to Graphical Models and Bayesian Networks, http://www.cs.berkeley.edu/murphyk/Bayes/bayes.html, pp. 1-19.
	6S	Maybeck, P.S., Stochastic Models, Estimation, and Control, Vol. I Academic Press, 1979.

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